

CLEAN COPY OF NEW AND AMENDED CLAIMS

Claims 1, 2, and 13 are amended, as follows:

1. (Amended) A process for forming an extended polyalkylene-grafted interpolymer or gel, comprising:

a) in a mixer, mixing

1) a polymer comprising mer units derived from maleic anhydride and mer units derived from at least one of

(A) a vinyl aromatic monomer, and

(B) an $R^1(R^2)$ ethylene monomer in which R^1 and R^2 independently are selected from H and substituted or unsubstituted C_1 - C_{20} alkyl or alkoxy groups, and

2) a maleated polyalkylene, so as to form a blend;

b) in said mixer, adding to said blend a diamine and allowing it to react with the mer units derived from maleic anhydride and with the maleated polyalkylene to form a polyalkylene grafted interpolymer; and

c) allowing the polyalkylene-grafted interpolymer to cool in said mixer

and, without removing the interpolymer from the mixer, adding an extender to provide said extended polyalkylene-grafted interpolymer; and

d) optionally, extruding the extended polyalkylene-grafted interpolymer to form a gel having a $\tan \delta$ of at least 0.3.

2. (Amended) The process of claim 1 wherein step a) includes mixing from about 50 to about 99 weight % of said polymer and from about 1 to about 50 weight % of said maleated polyalkylene and wherein step b) includes adding from about 0.1 to about 10 weight % of said diamine.

13. (Amended) A single batch process for preparing a polymer composition which includes a polyalkylene-grafted interpolymer, said process comprising:

- 5 a) forming a maleimide interpolpolymer in a mixing vessel by reacting an amine with a portion of maleic anhydride-derived mer units of an interpolpolymer comprising maleic anhydride-derived mer units and at least one of

- 1) vinyl aromatic-derived mer units, and
- 2) $R^1(R^2)$ ethylene-derived mer units in which R^1 and R^2

10 independently are H or substituted or unsubstituted C_1 to C_{20} alkyl groups or alkoxy groups;

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- 15 b) without removing the product of step a) from the mixing vessel, adding sufficient maleated polyalkylene such that the mixing vessel contains from about 1 to about 50 weight percent maleated polyalkylene and from about 50 to about 99 weight percent maleimide interpolpolymer;

- c) mixing from about 0.1 to about 10 weight % of a diamine with the maleimide interpolpolymer and maleated polyalkylene in the mixing vessel to form said polyalkylene-grafted interpolpolymer; and

- 20 d) without removing the product of step c) from the vessel, cooling the polyalkylene-grafted interpolpolymer in the mixer to a temperature at which an extender is stable in the polyalkylene-grafted interpolpolymer, and adding an extender to the mixer.

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